

United States Department of Agriculture



Natural Resources Conservation Service
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July 21, 2004

To be sent via E-mail

MINNESOTA BULLETIN NO. 360-4-28

SUBJECT: PER - TRAINING - JURISDICTIONAL DELINEATION OF WETLANDS IN
MINNESOTA

Purpose. To inform participants about Wetland Delineation Training.

Expiration Date. September 30, 2004.

Action Requested by August 1, 2004

The Minnesota Board of Water & Soil Resources, the Natural Resources Conservation Service and the U.S. Army Corps of Engineers will be conducting a Jurisdictional Delineation of Wetland in Minnesota Workshop for NRCS employees on August 23-27, 2004 at the Initiative Foundation, 405 First Street SE, Little Falls, Minnesota.

The workshop will be a mix of classroom and field exercises. The agenda is attached. Participants will need to bring appropriate clothing and supplies for working in wetland environments including boots, long sleeve shirts, hats, bug spray, sunscreen, rain gear, etc. Box lunches for field days will be provided by Sheri's Towne Deli, Little Falls. NRCS employees will need to deduct meals provided from their travel vouchers.

A block of rooms has been set up under Wetland Training at the following motels – **call to make your motel room reservations by August 1st**.

- Super 8 Motel, 300 12th Street NE, Little Falls - Phone 320/632 2351 (12 rooms available)
- AmericInn, 306 Lemieur Street SE, Little Falls - Phone 320/ 632 1964 (14 rooms available)
- Country Inn and Suites, 209 16th Street, Little Falls - Phone 320/632 1000 (15 rooms available)

WILLIAM HUNT
State Conservationist

Attachments: Participant List, Agenda

DIST: Participants & Instructors
Joe Wiltsey, Training Coordinator
AO-ACS
AO-SEC
SO-PRIN

An Equal Opportunity Provider and Employer

WETLAND DELINEATION REG 4**COE****INSTRUCTORS**

JACOBSEN, SONIA

CORNELIUS, SID

STEFFEN, KIM

WILTSEY, JOE

LARSON, GREG

MINGS, TOM

EGGERS, STEVE

PARTICIPANTS

ALEXANDER, NANCY

BEHRENS, MELISSA

BENGTSON, SHANNON

BYERS, ANN

BYRNS, TIM

CHRISTENSEN, KEITH

DRAGSETH, DOUG

ELLEFSON, BEN

ESPE, THANE

HALFMANN, KURT

HASBROUCK, BONNIE

KJORNESS, JEFF

KRUSE, RYAN

KUNKEL, MARV

LEGATT, MICHELLE

LEONHARDT, KRYSTAL

LINDNER, JULIE

MARQUEZ, RAELENE

MOHRHAUSER, GEORGE

PETER, AARON

PETERSON, TOM

SCHAUNAMAN, JAIME

SCHMIEDLIN, GARY

SCHMIESING, RANDY

STOKES, YAMIKA

WALCZYNSKI, MIKE

WENDLAND, ALLISA

WOLTJER, ADAM

ZABINSKI, LEE

LITTLE FALLS**23-27 AUG****BWSR/NRCS**

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CROSSLAKE

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ST PAUL

MOORHEAD

CROOKSTON

THIEF RIVER FALLS

ALBERT LEA

DULUTH

MILACA

CLARKFIELD

DULUTH

HALLOCK

LIVERNE

ROSEAU

OLIVIA

FAIRMONT

MORA

WINDOM

BEMIDJI

HINCKLEY

WABASHA

WAITE PARK

DULUTH

SLEEPY EYE

PRESTON

DULUTH

MORRIS

LEWISTON

DULUTH

SLAYTON

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JURISDICTIONAL DELINEATION OF WETLANDS IN MINNESOTA

**Initiative Foundation, 405 First Street SE
Little Falls, Minnesota
August 23-27, 2004**

AGENDA

DAY 1 – Monday, August 23rd - LECTURE- At Initiative Foundation

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|-------------------------|---|
| 9:00 a.m. - 9:30 a.m. | Registration - At course registration desk at Initiative Foundation |
| 9:30 a.m. - 10:00 a.m. | <u>Welcome</u> <ul style="list-style-type: none">• Introduction of InstructorsWiltsey• Introduction of Class• Course Agenda• Course Objectives• Safety• Introduction to Texts and Materials.....Larson• Experience Questionnaire |
| 10:00 a.m. - 10:30 a.m. | Pre-Test |
| 10:30 a.m. - 10:45 a.m. | Break |
| 10:45 a.m. – Noon | <u>Wetland Regulatory and Delineation Overview</u> <ol style="list-style-type: none">1. The Minnesota Wetland Conservation Act and DNRMings Protected Waters and Calcareous Fens2. Federal Clean Water ActEggers3. USDA Farm BillCornelius |
| Noon. - 1:00 p.m. | Lunch - Provided |
| 1:00 p.m. - 1:45 p.m. | <u>Off-site and Onsite Determinations and Methods</u>Mings |
| 1:45 p.m. - 2:45 p.m. | <u>Wetland Soils Lecture</u>Larson <ol style="list-style-type: none">1. Soil Formation2. Soil Classification3. Geomorphology/Landscape Considerations4. Soil Classification and Color5. Soil Surveys6. Mandatory Criteria for Hydric Soils/Lists7. Hydric Soil Field Indicators |
| 2:45 p.m. - 3:00 p.m. | BREAK |
| 3:00 p.m. - 4:30 p.m. | <u>Wetland Soils Lecture (Continued)</u> Questions and Answers |

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|-----------------------|--|
| 4:30 p.m. - 4:45 p.m. | Field Team Assignments |
| 4:45 p.m. – 5:15 p.m. | Distribute and Inventory Field Gear to Teams |
| 5:15 p.m. - 5:30 p.m. | Handout Soils Homework |
| 5:30 p.m. | ADJOURN |

DAY 2 – Tuesday, August 24th - LECTURE At Initiative Foundation

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|-------------------------|--|
| 8:00 a.m. - 8:30 a.m. | Wetland Soils Homework ReviewLarson |
| 8:30 a.m. - 9:00 a.m. | <u>"Normal Environmental Conditions" Discussion I</u>Larson <ul style="list-style-type: none"> • Normal Circumstances • Growing Season |
| | <u>Wetland Vegetation and Classification Lecture</u> |
| 9:00 a.m. - 9:20 a.m. | 1. Introduction to the National/Regional List of Plant Species That Occur in WetlandsEggers |
| 9:20 a.m. - 9:45 a.m. | 2. Overview of MN Wetland Plants and Plant Communities ...Eggers |
| 9:45 a.m. - 10:15 a.m. | 3. Mandatory Criteria for Hydrophytic VegetationEggers |
| 10:15 a.m. - 10:30 a.m. | BREAK |
| 10:30 a.m. - 11:40 a.m. | <u>Wetland Vegetation Lecture</u> - Continued |
| 11:40 a.m. - 12:25 p.m. | 4. Wetland Classification/TypeMings <ul style="list-style-type: none"> • Wetland Classification Systems • WCA wetland types |
| 12:25 p.m. | Handout Vegetation Homework |
| 12:25 p.m. - 12:35 p.m. | Review Field Sites/Slides |
| 12:35 p.m. - 1:10 p.m. | Load the Bus - Travel to Field Site 1 - Eat box lunch en route |

DAY 2 - FIELD

Whipple Lake Bog - #1Instructor Team

| | |
|-----------------------|---|
| 1:10 p.m. - 1:30 p.m. | <u>"Gear Talk"</u>Larson <ul style="list-style-type: none"> • Field Equipment Discussion |
| 1:30 p.m. - 5:00 p.m. | <u>Routine Delineation of an Unaltered Wetland</u> |
| | 1. Data Sheets - (Break into three groups) |
| | A. Establishment of Vegetative PlotsEggers and Mings <ul style="list-style-type: none"> - Vegetation Identification - Vegetative Stratum - Forested Area Methods |

- B. Soils and HydrologyLarson and Steffen
 - Hydrology Sources
 - Field Indicators
 - Groundwater Interaction; Observation Wells; Peat Formation
- C. Walk-through a Delineation
- 2. Field Discussion
 - Wetland Formation
 - Wetland Type
 - Jurisdictional Discussion
- 3. Routine On-Site Delineation (break into teams)
- 5:00 p.m. - 5:30 p.m. Return to Initiative Foundation /Adjourn

DAY 3 – Wednesday, August 25th - LECTURE At Initiative Foundation

- 8:00 a.m. - 8:30 a.m. Vegetation Homework Review..... Eggers
- 8:30 a.m. - 9:30 a.m. "Normal Environmental Conditions" Discussion IIEggers
 - Problem Wetlands
 - Atypical situations
- 9:30 a.m. - 10:15 a.m. Wetland Hydrology LectureJacobsen
 - 1. Wetland Origins and Geologic Setting
 - 2. Hydrology Introduction
 - 3. Groundwater and Wells
 - 4. Altered Conditions - Scope and EffectJacobsen
- 10:15 a.m. - 10:30 a.m. Break
- 10:30 a.m. - 12:40 p.m. Hydrology Lecture (Continued)
- 12:40 p.m. - 12:50 p.m. Review Field Sites/Slides
- 12:50 p.m. - 12:55 p.m. Handout Hydrology Quiz/Homework
- 12:55 p.m. - 1:30 p.m. Load Bus - Travel to Field Site 2 - Eat box lunch en route

DAY 3 - FIELD

- Ereaux WMA - #2**Instructor Team
- 1:30 p.m. - 4:30 p.m.
 - 1. Wetland Type
 - 2. "Normal Environmental Conditions"- Discussion
 - 3. Historical Data

4. Vegetative Regeneration
5. Jurisdictional Discussion
6. Approaches/Requirements for Intermediate (Vegetative Dominance) and Comprehensive Level Delineations.....Eggers
7. Delineation Mapping Exercise: Quality Assurance/Quality Control and Inspection of Jurisdictional Delineations Completed by Others;

4:30 p.m. - 5:00 p.m. Return to Initiative Foundation

DAY 4 –Thursday, August 26th - FIELD - Leave From Initiative Foundation

Little Elk WMA - #3, Larry Hlad Ditch Site - #4Instructor Team

8:00 a.m. - 8:25 a.m. Review Field Sites/Slides

8:25 a.m. – 9:00 a.m. Load Bus at Initiative Foundation - Travel to Site 3, Little Elk WMA

9:00 a.m. - 11:15 a.m. Little Elk Wildlife Management Area - #3..... Instructor Team

Routine Delineations With Emphasis On;

- Wetland Delineation/Mapping; Jurisdictional Issues
- Delineation of Riparian Wetlands (with altered vegetation)

11:15 a.m. - 12:15 p.m. Lunch in Field and Review Hydrology Quiz/Homework

12:15 p.m. - 12:30 p.m. Load Bus - Travel to Field Site 4

12:30 p.m. - 4:30 p.m. Ditched Wetland - #4Instructor Team

1. Recognition of Altered Hydrology
2. "Scope and Effect" Determinations/Limitations
3. Determination of Normal Environmental Conditions/Problem Areas
4. Three Parameter Delineation of an Altered Site
5. Return to Initiative Foundation
6. **Inventory and Return Field Gear**
7. Handout Disturbed/Problem Area Homework

4:30 p.m. – 5:00 p.m. Return to Initiative Foundation

DAY 5 - Friday, August 27 – At Initiative Foundation

Check out of Hotels

8:00 a.m. - 8:30 a.m. Review Disturbed/Problem Area Homework

8:30 a.m. - 9:00 a.m. Course Synthesis/Final Questions and Answers

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|-------------------------|---|
| 9:00 a.m. - 10:15 a.m. | Written Examination |
| 10:15 a.m. - 10:30 a.m. | BREAK |
| 10:30 a.m. - 11:15 a.m. | Review written examination |
| 11:15 a.m. - 11:45 a.m. | Course Evaluation |
| 11:45 a.m. - Noon | Distribute Certificates of Training with pretest and final test results |

Drive Safely Home

2004 INSTRUCTORS

Sid Cornelius, Resource Conservationist, Natural Resources Conservation Service, St. Paul

Steve Eggers, Senior Ecologist, U.S. Army Corps of Engineers – Regulatory Branch, St. Paul

Sonia Maassel Jacobsen, Hydraulic Engineer, USDA – Natural Resources Conservation Service, St. Paul

Greg Larson, State Soils Specialist, BWSR/University of Minnesota, St. Paul

Tom Mings, Sr. Wetlands Specialist, MN Board of Water and Soil Resources – St. Paul

Kim Steffen, Soil Scientist, Natural Resources Conservation Service—St. Paul